

NOTES

A NEW SPECIES OF *BAUHINIA* (*LEGUMINOSAE*) FROM PERU

Continued revisionary studies of the neotropical species of *Bauhinia* have resulted in the discovery of a new species of the genus endemic to Peru.

Bauhinia hirsutissima Wunderlin, sp. nov.

Frutex scandens cirrhosus; rami juvenales fuscoporphyro-hirsuti. Folia anguste ovata ad oblonga, ca. $\frac{1}{3}$ vel rare $\frac{2}{3}$ longitudine bilobata, 5–14 cm longa, 4–10 cm lata, apice acuminata ad obtusa, basi profunde cordata, margine revoluta, chartacea ad subcoriacea, supra glabra, infra fuscoporphyro-hirsuta, 9- ad 11-nervata; petioli 3–5(–7) cm longi; stipulae reniformes. Inflorescentiae racemosae, terminales vel subterminales et axillares, graciles, laxae, fuscoporphyro-hirsutae; rhachis 12–40 cm longa; gemmae ovoideae, excrescentibus apicalibus gemmarum ovato-lanceolatis, 3–5 mm longis, incurvatis; bracteae et bracteolae anguste lanceolatae, 5–7 mm longae; pedicelli graciles, 5–10 mm longi; hypanthium cyathiforme ca. 1 mm longum; calyx campanulatus vel leviter bilabiatus, 15-nervatus; petala 5, subaequalia, alba vel subrosea, 10–12 mm longa, lamina late elliptica, intra glabra, extra dense adpresso-pilosa, ungue lamina longiore vel subaequalia; stamina fertilia 10, tubo calycis longitudine subaequalia, libra, 5 glabra, 5 versus apicem pilosa, antheris oblongis, ca. 1 mm longis; gynoe-cium staminibus longitudine plus minusve aequale, stylo brevi, crasso, arcuato, glabro, ovario dense hirsuto, gynophoro minuto, stigmatibus obliquo. Legumen dehiscens, oblongum ad anguste obovatum, apiculatum, ca. 7.5 cm longum, ca. 2.5 cm latum, brunneum glabratum; semina suborbiculata, 11–12 diam., pagina hebetata puncticulata, obscure striata, brunnea, cicatricibus funiculi ramorum longitudine subaequalibus, ca. 1 mm longa.

Tendriled woody vine; young branches reddish brown hirsute, glabrescent in age, older stems not seen; intrastipular tendrils single or paired, woody, circinate. Leaves narrowly ovate to oblong, bilobate ca. $\frac{1}{3}$ or rarely $\frac{2}{3}$ their length, 5–14 cm long, 4–10 cm wide, the apex of lobes acuminate to obtuse, the base deeply cordate, the margin revolute, chartaceous to subcoriaceous, glabrous above, reddish brown hirsute below, the lower surface frequently purplish-tinged, 9–11-nerved; petioles 3–5(–7) cm long, reddish brown hirsute; stipules reniform, 5–10 mm long, 2–5 mm wide; intrastipular excrescences other than tendrils minute. Inflorescences racemose, terminal or subterminal and axillary, elongate, slender, lax, reddish brown hirsute throughout; rachis 12–40 cm long, the lower flowers soon deciduous, the inflorescence then frequently with 10–30 flowers on a long-pedunculoid rachis; buds ovoid, 6–8 mm long, the free tips ovate-lanceolate, 3–5 mm long, incurved; bracts narrowly lanceolate, 5–7 mm long; bracteoles similar to the bracts, but smaller, attached near or above the middle of the pedicel; pedicels slender, 5–10 mm long; hypanthium cyathiform, ca. 1 mm long; calyx campanulate or slightly bilabioid at anthesis, 15-nerved, each trio of nerves ending at one of 5 ovate-lanceolate appendages at the rim of the calyx tube, the median nerve extending the length of appendage, the lateral 2 ending at the base of the appendage or inconspicuously extending up to $\frac{1}{2}$ its length; petals 5, subequal, white or faintly tinged with pink, 10–12 mm long, the blade broadly elliptic, 5–7 mm long, 3–4 mm wide, glabrous internally, densely appressed brown-pilose externally, the claw longer than to nearly equal-

ling the length of the blade, brown pilose; fertile stamens 10, \pm equalling the calyx tube, free to the base, alternate ones slightly shorter, the longer 5 glabrous, shorter 5 brown pilose towards the tip, the filaments arcuate, the anthers oblong, ca. 1 mm long, white-pilose; gynoecium \pm equalling the stamens, the style short, thick, arcuate, glabrous, the ovary densely brown-hirsute, the gynophore not evident, the stigma oblique, slightly differentiated from the style. Fruit a dehiscent legume, oblong to narrowly obovate, apiculate with a persistent style, ca. 7.5 cm long, ca. 2.5 cm wide, dark brown, glabrate, gynophore not seen; seeds suborbicular, ca. 12 mm long, ca. 11 mm wide, the surface dull, punctulate, obscurely striate, dark brown, funicular-branch scars subequal, ca. 1 mm long. Chromosome number unknown.

TYPE: PERU. LORETO: Fortaleza, near Yurimaguas, ca. 140 m, forest, Dec. 1932, *G. Klug 2800* (US, holotype; F, MO, NY, isotypes).

Specimens examined: PERU. LORETO: Quebrada Shanuce above Yurimaguas, *Croat 18065* (MO, duplicates to be distributed). Lower Río Huallaga, *Killip & Smith 27601* (F, NY, US), *28302* (F, NY, US). Fortaleza, Yurimaguas, *Ll. Williams 4216* (F, US), *4485* (F, US).

Distribution: Known only from near Yurimaguas on the Río Huallaga, Loreto, Peru. It occurs in forests at elevations of about 140 meters. Flowering material has been collected from July through December with nearly mature fruiting material collected in December.

The newly described species is most closely related to the widespread and highly variable *B. glabra* Jacq., but is distinguished by the following combination of characters: young branches, inflorescences, and lower leaf surfaces conspicuously deep reddish-brown hirsute; inflorescences elongate, slender, lax, with flowers distantly arranged; flower buds ovate, with incurved lanceolate apical excrescences; petal blades 5–7(–8) mm long, without purple spots. In contrast, the vestiture of *B. glabra*, when approaching that of *B. hirsutissima*, is pilose and has a coppery sheen. One local race of *B. glabra* whose pubescence is very similar to that of *B. hirsutissima* is restricted to Panama and differs in all other respects. The flowers of *B. glabra* have petal blades 10–20 mm long, one of which is usually conspicuously marked with purple spots, although sometimes obscure in local races. In *B. glabra* the flower buds are lanceolate with setiform or rarely lanceolate apical excrescences and the inflorescences, if elongate, are strict and with the flowers more closely arranged.

Bauhinia reflexa Schery, a Panamanian and Colombian species, has the vestiture of its leaves, young branches, and inflorescence rachis in addition to the purple-tinged undersides of its leaves like *B. hirsutissima*, but differs in all other respects.

Finally, *B. hirsutissima* also superficially resembles *B. killipiana* Standley and to a lesser degree *B. vulpina* Rusby and *B. porphyrotricha* Harms, but differs slightly in nearly all characters. Specimens determined to be *B. hirsutissima* have frequently been identified by other workers as *B. porphyrotricha*. Examination of type material of *B. killipiana*, *B. vulpina*, and *B. porphyrotricha* reveal that these species are best placed in synonymy with *B. glabra* sensu lato.

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ALNUS MARITIMA MUHL. EX NUTT., NOT ALNUS METOPORINA FURLOW

The new name, *Alnus metoporina* Furlow, proposed in a recent issue of this journal (Furlow, 1976) to replace the long-recognized *Alnus maritima* Muhl. ex Nutt., is unnecessary according to Article 55 of the International Code of Botanical Nomenclature (Stafleu et al., 1972) which states:

When a species is transferred to another genus or placed under another generic name for the same genus without change of rank, the specific epithet, if legitimate, must be retained or, if it has not been retained, must be reinstated unless one of the following obstacles exists:

- (1) The resulting binary name is a later homonym (Art. 64) or a tautonym (Art. 23).
- (2) An earlier legitimate specific epithet is available (but see Arts. 13f, 58, 59, 72).

The genus *Betula-Alnus* was validly published by Humphry Marshall in his *Arbustrum Americanum* (1785), and three species, including *B. maritima*, placed in it. Marshall's description of *B. maritima* is sketchy, mentioning only the height of the plant, the "long and narrow" leaves, and the very distinctive August anthesis. Marshall did not cite a type nor did he keep an herbarium, and so we do not know on what material the species was based. However, we have no doubt that the plant was the same species that was later described by Henry Muhlenberg in an unpublished manuscript, and subsequently validly published by Thomas Nuttall (1842) in the first volume of his *Sylva*. *Alnus maritima* was described as a new species in the genus *Alnus*, based not upon Marshall's name [as assumed by some authors, see Little (1953)] but upon Muhlenberg's manuscript name.

We know that Muhlenberg was well acquainted with Marshall's work for in a letter to William Bartram dated 10 December 1792 (Darlington, 1849), he wrote: "Marshall has given me some satisfaction, but his *Arbustrum* wants some emendations. Any observations that way where you think he is wrong, or where another name might have been given, would be so pleasing to me."

It is likely that Muhlenberg may have recognized that his species was *Betula-Alnus maritima* of Marshall, and that he intended to make the transfer to *Alnus*, and to typify the species on the Bartram collection he had. However, there is nothing in the manuscript preserved at the Philadelphia Academy of Sciences Library to suggest this, and we may only speculate on Muhlenberg's intentions.

Nuttall apparently put even less faith in Marshall's work, for he never mentioned it directly in the first volume of his *Sylva*. Marshall is cited there only once, and then in synonymy under Nuttall's *Carya microcarpa*. Since a Muhlen-